EV3830 Series
IP Stand Server

Preliminary User Manual v 2.2

Advanced Information

Etrovision Proprietary and Confidential

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ETROVISION

MAX CLIENT LIMIT *26*
EVENT RULE 26
EVENTS HANDLED *27*
ACTIONS TRIGGERED *28*
RULE LISTS - ADDING/DELETING *28*
MODIFYING RULE LISTS *28*
VIDEO RECORD 28
DATE & TIME 30
OSD 31
PORT 32
DDNS 33
SMTP/FTP 34
E-MAIL – SMTP SETTINGS *34*
FTP SETTINGS *35*
TRIGGER SETUP 36
PERIODIC TIMER *36*
MOTION DETECTION *36*
Video Loss *38*
ACCOUNT 38
SECURITY 40
MAINTENANCE 41

9. FACTORY DEFAULT 42

10. REBOOT 42

11. LOGOUT 43

12. ETROLINK™ CONFIG PORT - FIRST TIME EXPERIENCE 43

SUPPORTED OS 44
NO SOFTWARE INSTALLATION REQUIRED 44
STEPS FOR USING ETROLINK™ CONFIG PORT (*WINDOWS XP PC)* 44
WHAT IF QUICKCONFIG DOES NOT AUTORUN? 48

1. PRODUCT OVERVIEW

EV3830 Series IP Stand Server is an innovative combination of network video server and camera stand. The video server circuit board is protected inside the stand base and the built-in combo cable is able to supply the power needed for CCTV camera and receive analog video signal from it too.

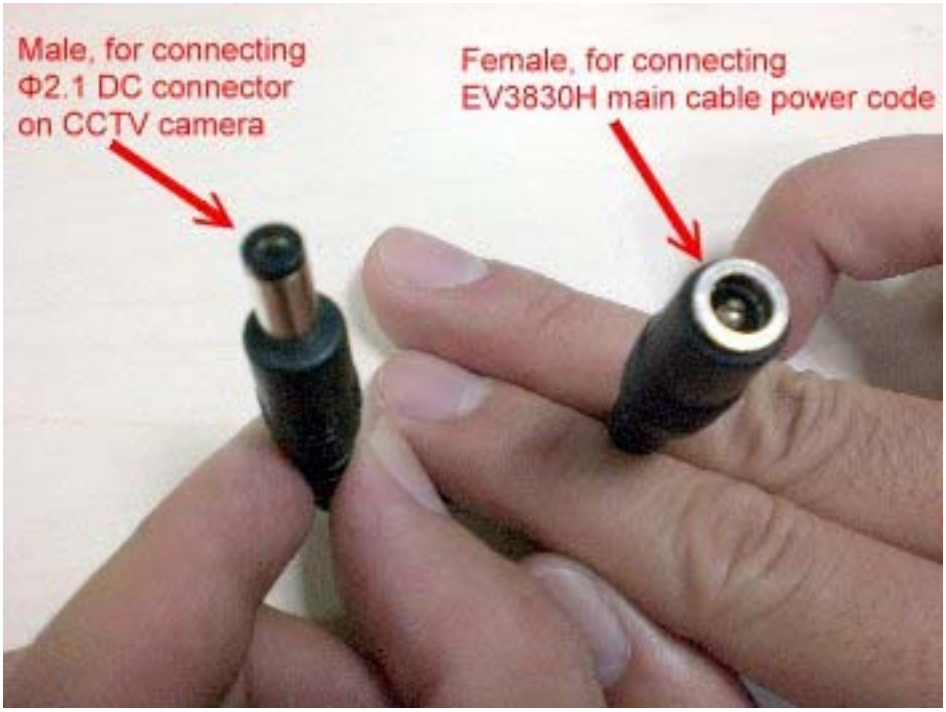
EV3830 Series IP Stand Server shares the advantages of both network cameras and video servers. Unlike network cameras, EV3830H leaves you the full flexibility of choosing different types of CCTV cameras while eliminating the drawbacks of video server installation. You no longer need to locate a proper place and independent power supply to install a video server. Simply mount a camera you like on EV3830H and install it like a network camera.

Current available models of EV3830 series includes

Features	EV3830HP	EV3830H
IEEE 802.3af Compliant Power of Ethernet (POE)	☆	

PACKAGE &CONTENTS

- IP stand server unit X 1
- Power adapter X 1
- USB cable X 1
- Screws
- Product CD X 1
- Φ2.5-to-Φ2.1 converter cable



*Note : The power jack on main cable is for Φ2.5 DC jack on CCTV camera, for Φ2.1 DC jack CCTV model, please use this converter cable.

2. Product CD

Product CD in the package contains the following:

- ✓ EtroStation™ NVR management software
  - o 16CH live view / Recording / Playback
- ✓ User Manuals
- ✓ Brochures

3. BEFORE YOU INSTALL SOFTWARE

- ✓ Only PC running Microsoft Windows 2000 or above is capable of running EtroStation™ software.
- ✓ PLEASE go through EtroStation™ users' manual before installation to check further PC requirements in order to ensure smooth software operation.

4. LANGUAGE SUPPORT

- ✓ ENGLISH

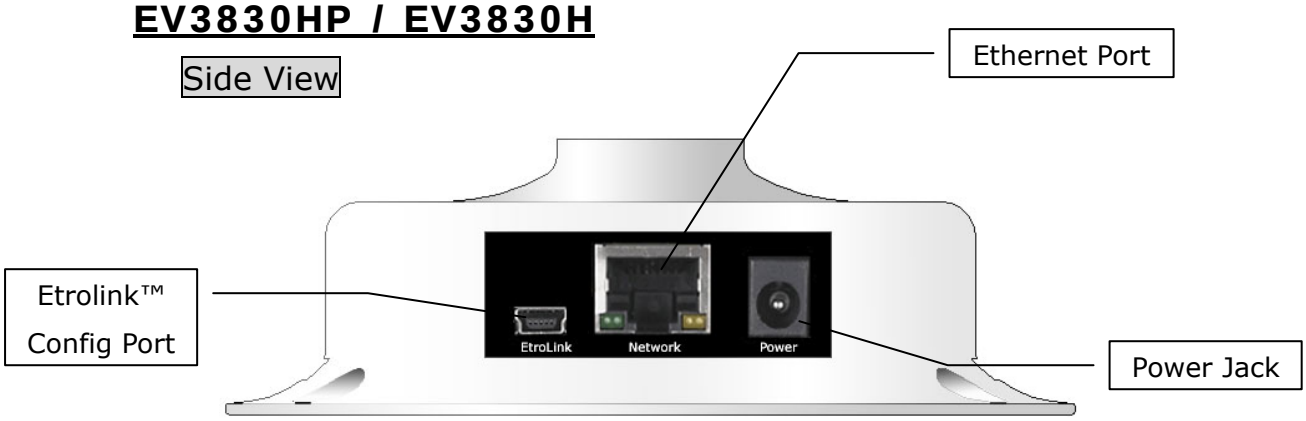
NOTE

EtroStation™ *setup will auto-run when inserting product CD. Pay attention to dialog box questions before you press* ***OK*** *button.*

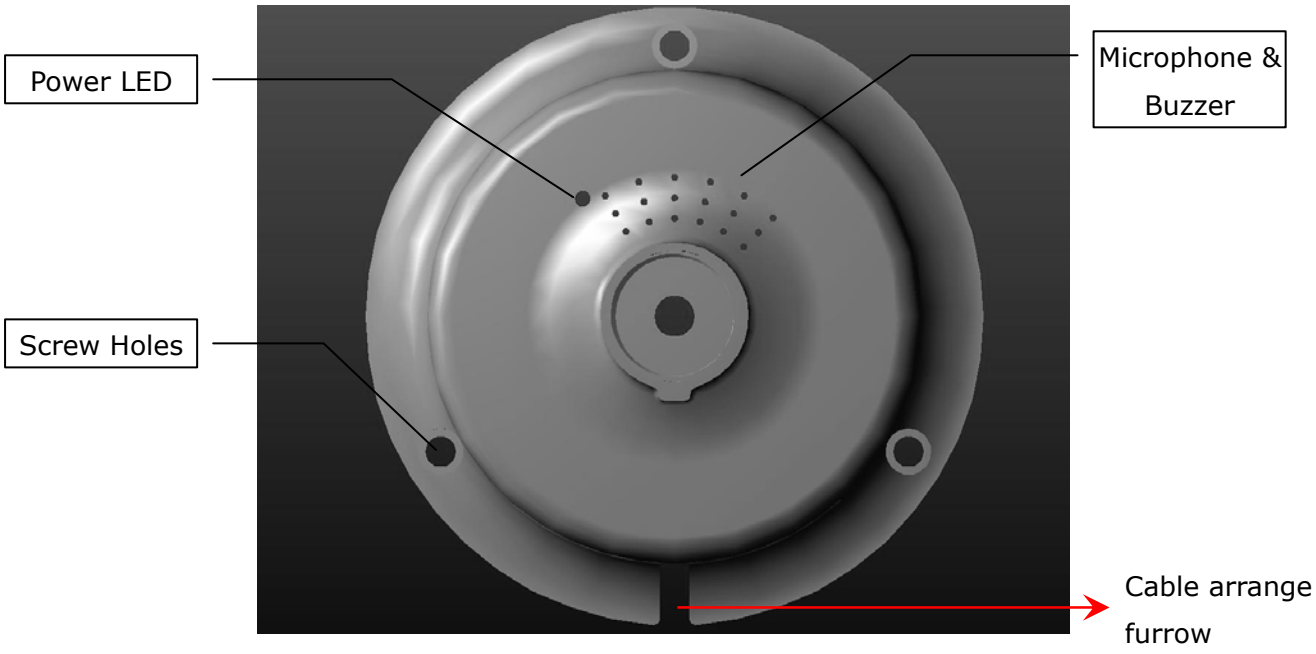
5. HOUSING and CONNECTORS

EV3830HP / EV3830H

Side View



Top View



6. FIRST TIME USE INSTRUCTIONS

INSTALL EV3830 Series IP Stand Server

Step 1

Insert the ComboCable through the tube

Step 2

Tighten the tube on the stand base

Step 3

Tighten the stand head onto the tube; then attach a CCTV camera on it

Step 4

Connect the Video and Power of the Combo Cable to the camera

Step 5

Adjust the camera's view angle and tighten the screw if necessary

INSTALL ETROSTATION™

Install **EtroStation™** software. **EtroScan™** is a software utility to find your video server on the network. It is a part of EtroStation™.

WHICH BROWSER TO USE?

We strongly recommend Microsoft IE browser version 6 or higher. Mozilla Firefox and similar others are not guaranteed to work with EV3830 series IP Stand Server.

POWER ON VIDEO SERVER

Power on video server by using power adapter provided in the product package. Connect power adapter to 110-220v AC socket.

For model EV3830HP with PoE support, the system can be powered either by remote PSE (Power Sourcing Equipment) or by the power adaptor.

Caution!

1. ***Please make sure your PSE is IEEE 802.3af compliant, otherwise the system may malfunction and cause severe system damage and hazard.***
2. ***The power supply on the combo cable has a limited output power of 7.5Watt, which should be able to power most indoor cameras. However, please double check the specifications of the camera to make sure it will not consume more than 7.5Watt (625mA at 12V).***

CONNECTING TO NETWORK

Connect a standard CAT5 Ethernet cable to R45 socket on EV3830 series IP Stand Server and connect other end to your network hub/switch. Make

sure the PC you want to access EV3830 series IP Stand Server is on the same network domain.

FACTORY SETTING - INITIAL IP ADDRESS

IP Address : 192.168.1.2
Gateway : 192.168.1.1

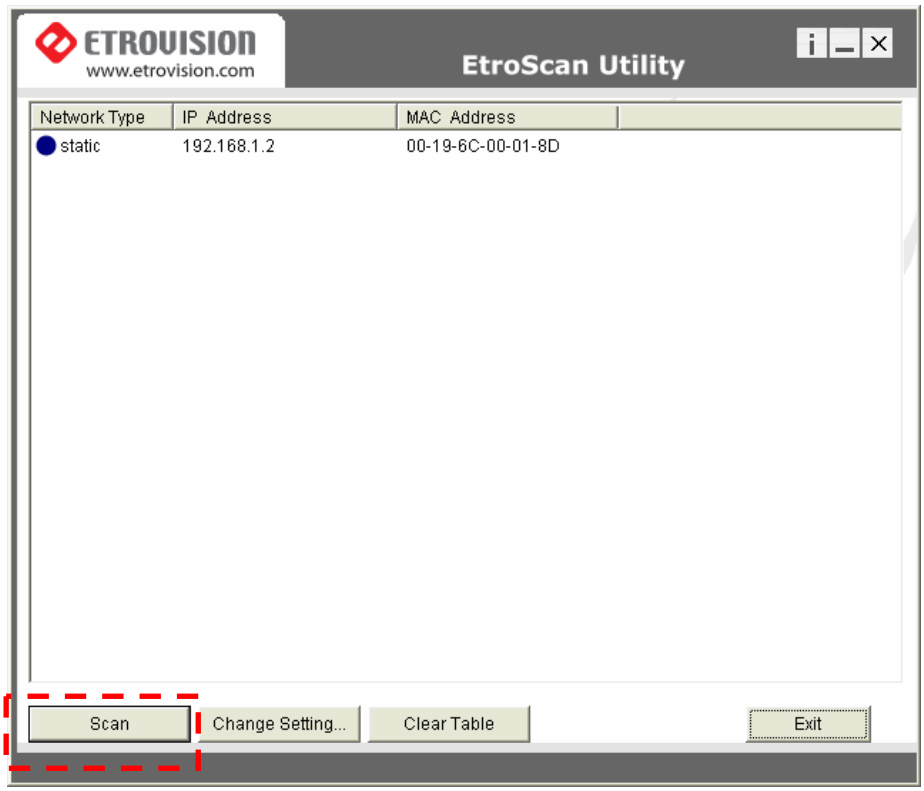
NETWORK DOMAIN

Change the IP of the PC you want to access EV3830 series IP Stand Server inline with 192.168.1.2. You can change the video server IP later as per your convenience using **EtroScan™** as described below.

USING ETROSCAN™

EtroScan™ software is the quickest way to make sure we can find EV3830 series IP Stand Server on your network. **EtroStation™** setup will install two applications. You can see as shown below.

Select **EtroScan™.** The following window appears after you select "**EtroScan™**" from start menu.

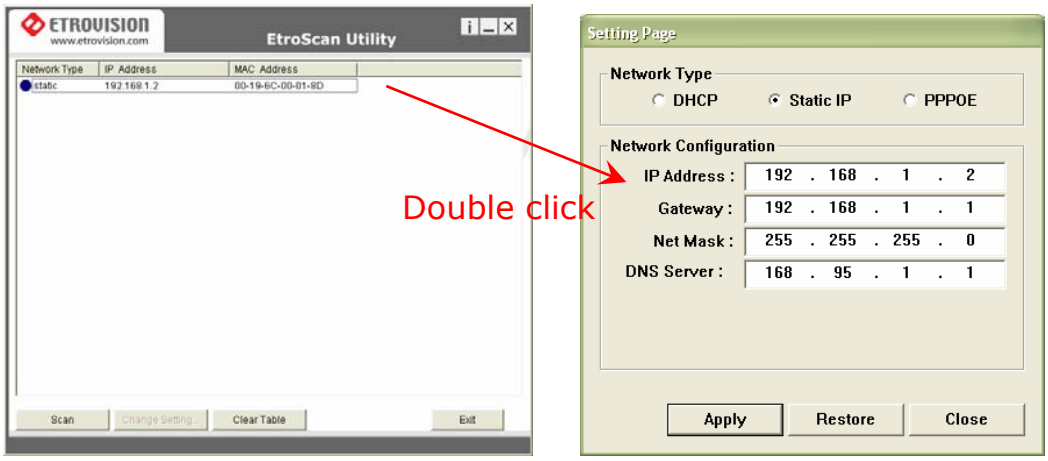


Press **Scan** button to list the IP and MAC address table. To refresh, press **Clear Table** and press **Scan** again.

You will find the list of IP and MAC address listed. To identify your EV3830 series IP Stand Server you can flip over the video server and on the bottom side you check the label for MAC address.

CHANGE NETWORK SETTINGS BY ETROSCAN™

You can double click a specific IP address and change some basic network parameters. A dialog box will appear as follows.



Change any settings you want to make and make sure you have correct values in all fields. Click **Apply**.

Within 10 seconds, the dialog box should disappear to indicate new settings are accepted and being applied. Wait for around 30 seconds, before trying to refresh IP list. Click **Clear Table** and click **scan** again.

You should be able to find MAC address of video server under new IP address. EV3830 series IP Stand Server is online on your network. Use **ping** command from Windows command prompt to double check if IP is reachable.

TIP

"DOUBLE RIGHT CLICK" ADVANTAGE

If you want to quickly open the IP you see on Etroscan™ on your browser, select an IP and do a "double right click" on your mouse/touchpad. You can see the browser window open that IP.

To quit **Etroscan™** anytime, click **Exit**.

7. ACCESS VIDEO SERVER

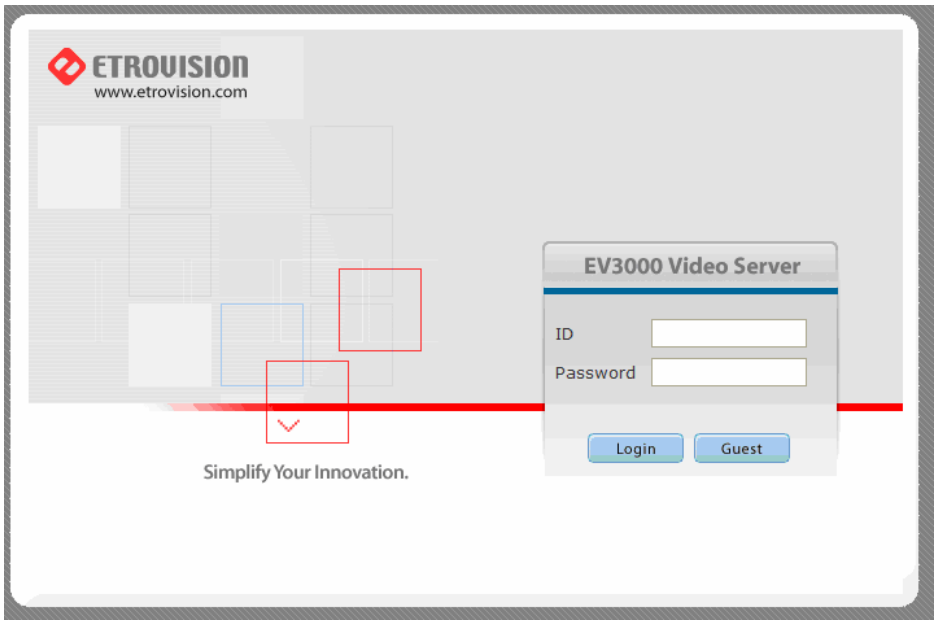
BROWSER

- Open IE browser
- Type IP address of video server that you found on **EtroScan™** software. For ex. **default IP is 192.168.1.2**
- Initial username and password are…

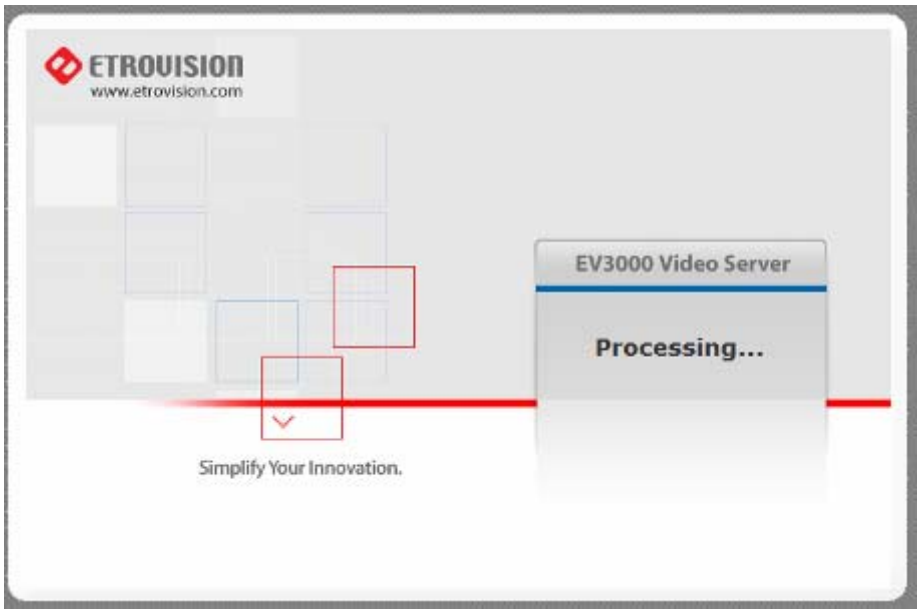
  Login: **root**

  Password: **pass**

  Click **Login** button to go to web view.



After successful login with root/pass, you will briefly see a screen as below.



INITIAL USERNAME & PASSWORD

Administrator

- Default ID/Password = **root / pass**.
- Only password is changeable.
- Full access right to view, control system settings.

Guest accounts

- ID/Password not necessary.
- Basic view and some action buttons can work.

VIEWING PAGE

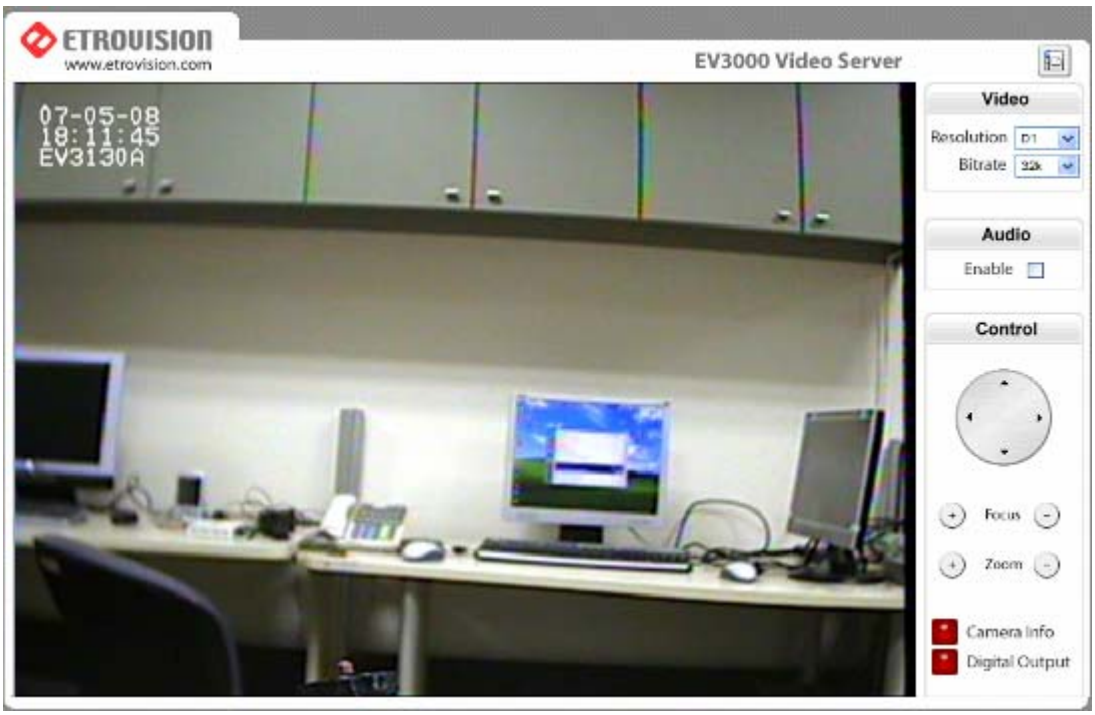
After successful log in as **Guest**, the viewing page will appear as follows.

The "**camera info**" button when clicked shows FPS, camera name and resolution values. This applies to all EV3830 Series IP Stand Server.

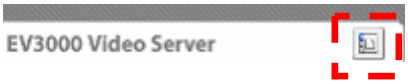
Guest Mode Viewer

When you log in successfully with ROOT/PASS as **administrator**, the viewer screen will display as shown below.

EV3830 Series IP Stand Server Live Viewer (Admin Mode)



1. Notice top right corner of viewing page



has a toggle button to take you between web configuration page & viewing page. Always click that if you want to move from one page to the other.

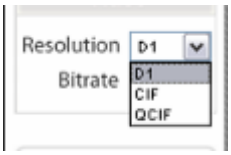
2. Several controls options are available on the right side.
3. OSD is displayed on top left corner of the screen (time, date, camera name)

CONTROL PANEL SETTINGS

➢ Video/Resolution

Following table describes resolution values for each video format

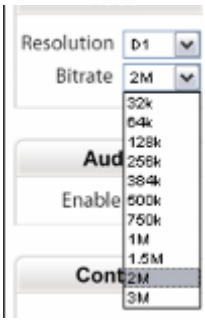
Resolution	CIF	QCIF	D1
NTSC	352X240	704X480	720X480
PAL	352X288	704X576	720X576



➢ Video \ Bit rates

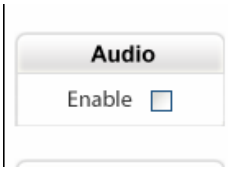
- Choose a particular value and it is applied within few seconds. Video on the screen will pause briefly.

  32K/64K/128K/256K/384K/500K/750K/1M/1.5M /2M/3M (bps)



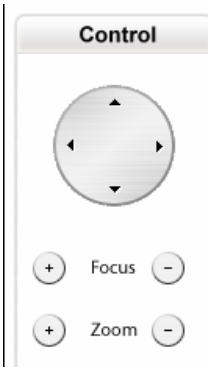
➢ Audio \ Enable check box (only EV3130A/AW)

- Enable or disable function for audio will result in

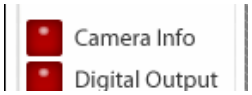


video flicker for a second and then return back to normal. This is not an error.

- P/T/Z controls (will need PTZ controller)
  - Z (Zoom): zoom in (+) / zoom out (-).
  - Pan/Tilt.
  - F (Focus): focus in (+) / focus out (-).



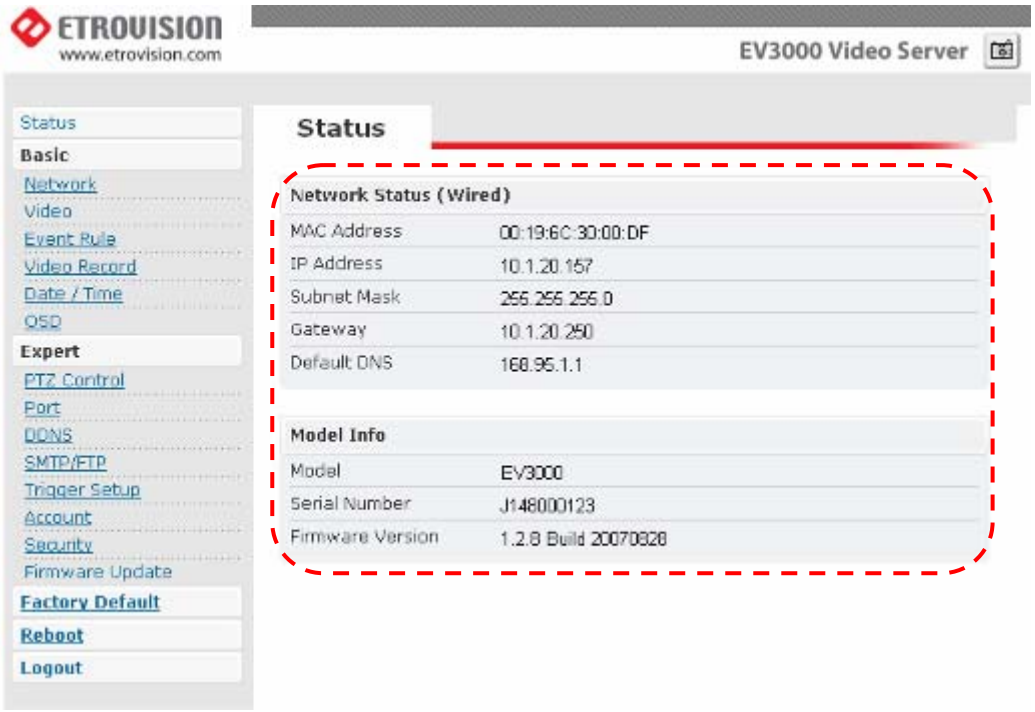
- Camera Information.
  - Shows video information of the transferred data on the upper left corner of the video screen such as frame rate (fps), channel name, resolution.



8. WEB INTERFACE SETTINGS

EV3830 Series IP Stand Server built-in web interface offers more advanced settings. On the main viewing page, click on (top-right) , to

enter server settings page. It is a toggle button to switch between Config and viewer pages.

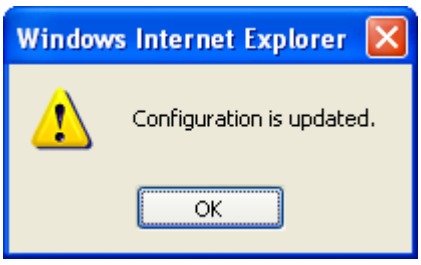


STATUS

- Initial view of web Config interface is status page.
- Hardware & Firmware information along with network status such as current IP and related details are clearly shown.

NOTE

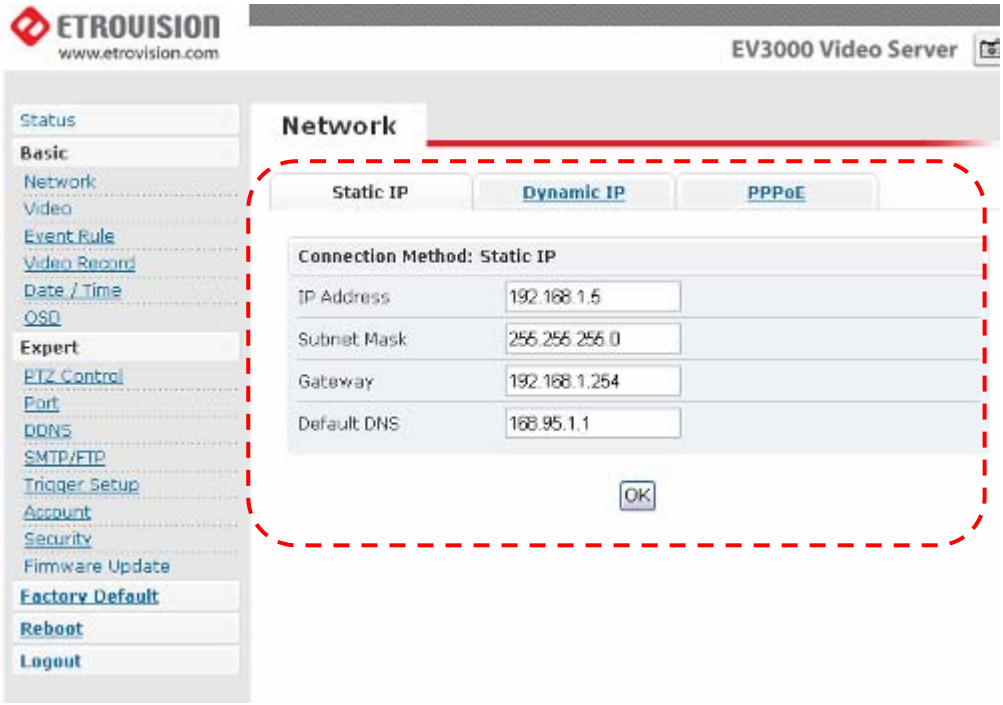
*Remember to press "**OK**" after you have changed settings in a particular settings page which has "**OK**" button. After few seconds, you can see a confirmation dialog box informing that settings have been updated. Pressing **OK** will return to the same page.*



NETWORK

Three configuration types are available for wired network connection STATIC, DYNAMIC & PPPoE.

STATIC IP



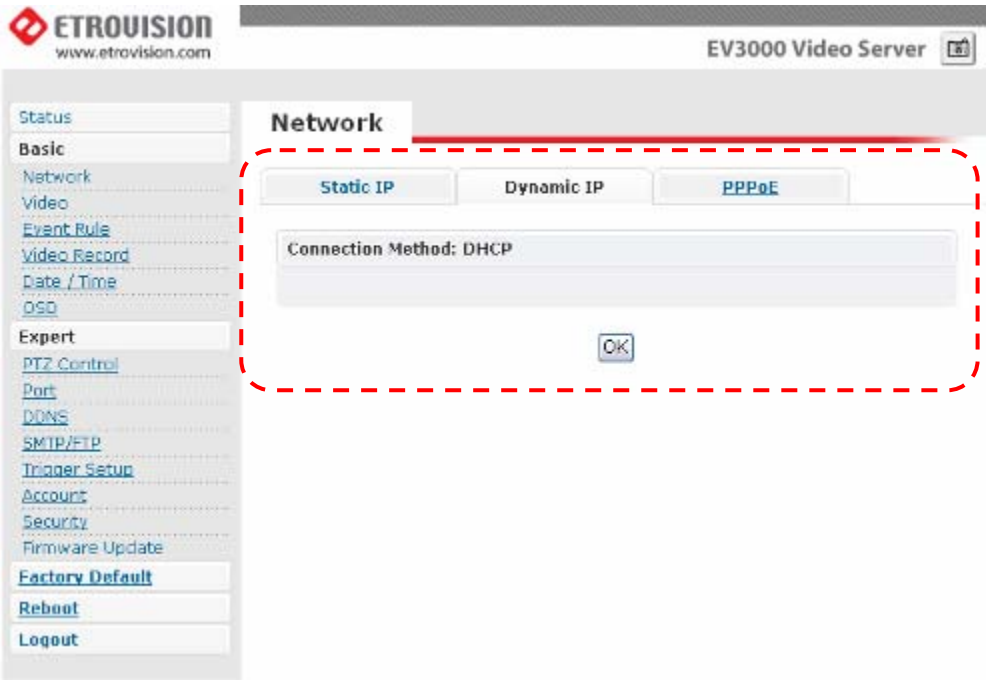
- IP Address
  - Confirm with network administrator.
- Subnet Mask/Gateway/Default DNS
  - Confirm with network administrator.
- Always click "**OK**" to save changes in a particular page.
- Reboot is required and will be automatically triggered after you press "**OK**". Wait for count down timer to finish and page will refresh automatically and you should see initial login page.

Note:

Always use EtroScan™ to find the MAC address after reboot and double check the IP address is correct. If IP was changed in web configuration, you cannot return to

initial login page after reboot.

DYNAMIC IP

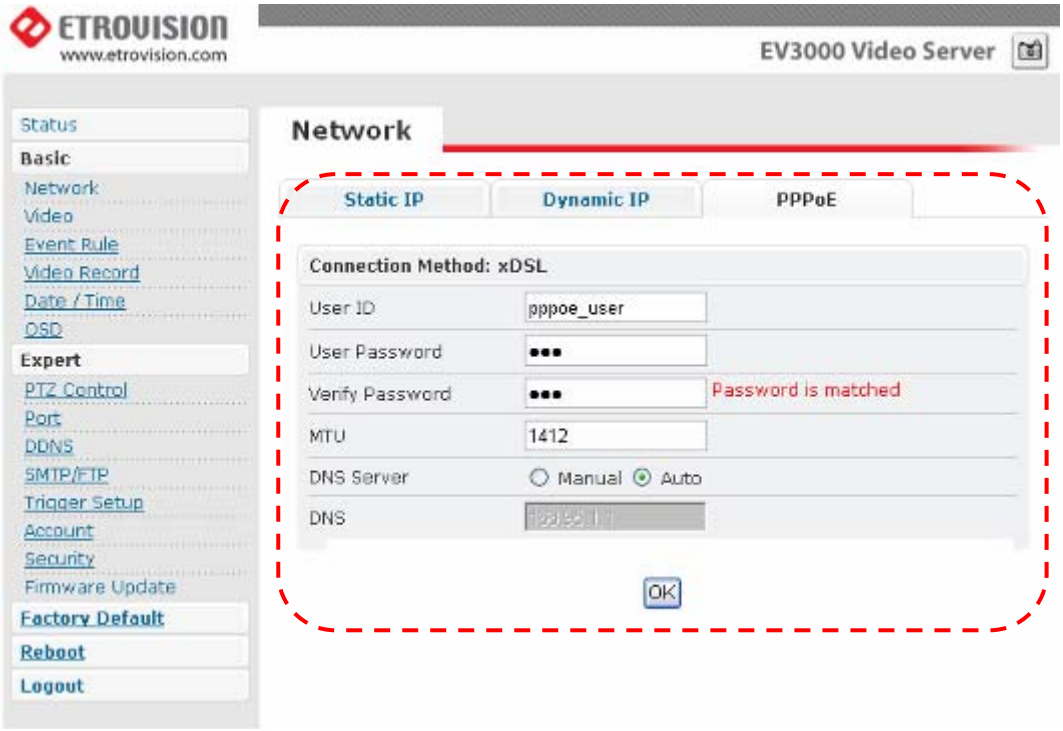


- If DHCP server is on LAN and you want to allocate Dynamic IP address, use DHCP.
- Click "**OK**" button.
- Reboot is required and will be automatically triggered after you press "**OK**". Wait for count down timer to finish and page will refresh automatically and you should see initial login page.

Note:

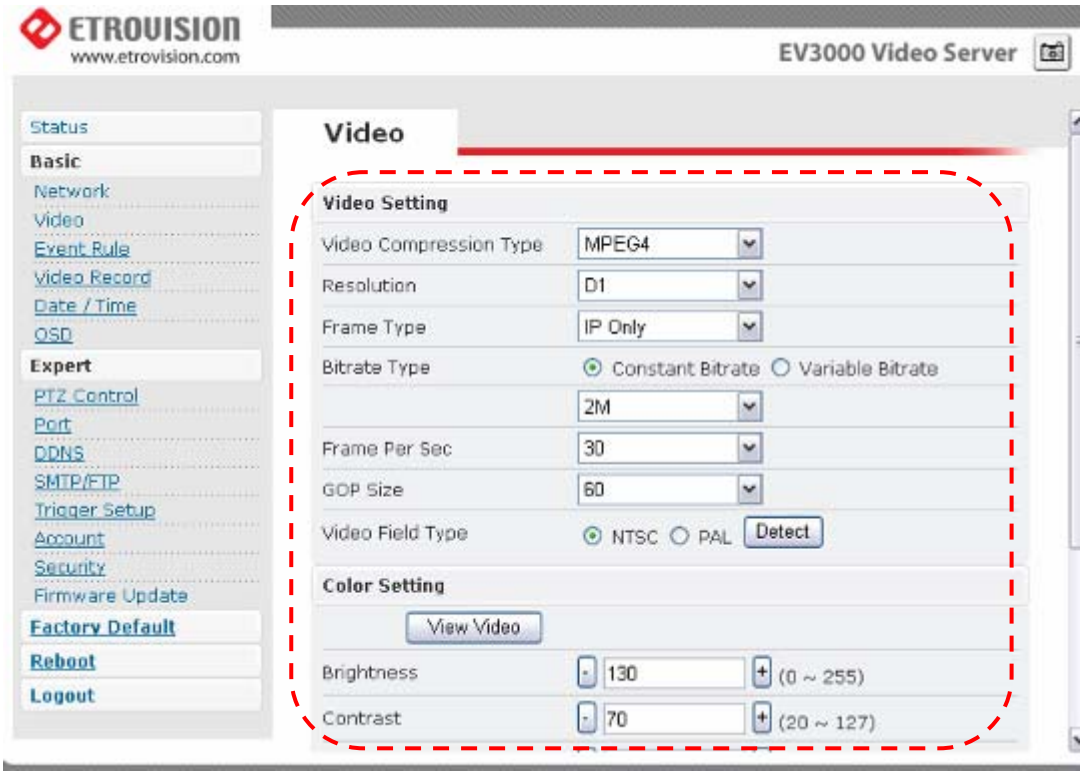
Always use EtroScan™ to find the MAC address after reboot and double check the IP address is correct. If IP was changed in web configuration, you cannot return to initial login page after reboot.

PPPoE SETTINGS



- PPPoE is used in case network supports PPPoE like xDSL
- Request Internet Service Provider for PPPoE ID/Password
- User ID / Password
  - PPPoE user ID / Password
- Service Name
  - Service name of ISP
- MTU
  - Maximum transmission unit of data
- IP address of DNS sever can be set to be created automatically.
- If xDSL does not use static IP, you should use DHCP.

VIDEO



VIDEO SETTINGS

- Video Compression Type
  - MJEPG / MPEG4
- Resolution
  - CIF /QCIF / D1
- Frame Types

  This setting deals with the Group of Pictures (GOP) structure - which could be a combination of I and P frames.

  I - I frames - also referred to as Key frames contain information for a complete picture, and can be decoded independent of any other frame. I frames are the largest (and least compressed) frames. Therefore for same quality, they consume high bit rate.

P - P frames are encoded using information from the previous I or P frame, and can only be decoded correctly if the previous I / P frame is available. P frames are smaller than I frames.

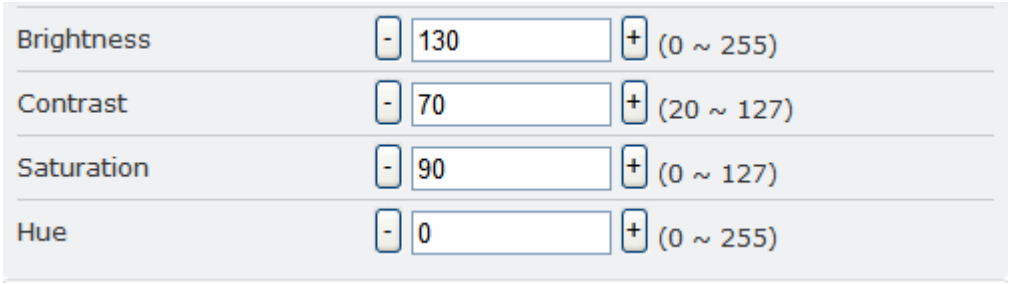
- I Only / IP Only
- IP - Simple Profile - Medium bit rates for same quality.
  I - Highest bit rates for same quality.
  ***When choosing MJEPG streaming, ONLY support "I Only" mode*

- Bit rate Type
  - Constant and Variable bit rates control allows flexibility in choosing how much bandwidth is available on network and quality of video required.
- Constant Bit rates
  - 3M / 2M / 1.5M / 1M / 750K / 500K / 384K / 256K / 128K / 64K / 32K
- Variable Bit rates
  - 2 ~ 31 (quality is best in case value is "**3**")
- Frame per Second.
  - 1 ~ 30
- Group Size
  - Adjusts the ration between "I" frames and "P" frames. Lower the group size, better the quality.
  - 5 / 10/ 15 / 30 / 60
- Video Type
  - NTSC / PAL

***System can automatically detect input video signal when clicking detect icon*

COLOR SETTINGS

Fine adjustments to video quality can be made using more detailed settings as shown below.



BRIGHTNESS

Adjusts the image on a scale from darkness to brightness.

CONTRAST

Adjusts the extent to which adjacent areas on a video differ in brightness

SATURATION

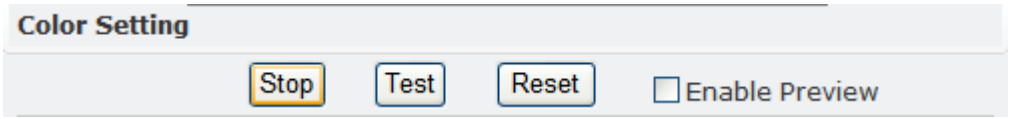
Adjusts the chromatic purity of video thereby effecting vividness.

HUE

Adjusts the video by effecting color depth

VIDEO PREVIEW

Preview makes choices easier when tuning video settings for specific locations. By clicking the **View Video** button, you can see the following



Click **Stop** to exit preview. You could change other video parameters and press **TEST** to see how the changes look like. You can press **Reset** anytime to return back to the default settings. Click **Enable Preview** checkbox to save the current settings – and its takes effect right after settings have been changed.

MAX CLIENT LIMIT

Maximum users (client) limit allows users accessing the video stream. For higher bit rates and resolution, the client limit is much lower and vice versa.

- Maximum number of clients can be restricted depending on how much video quality is required and network band with is available.
  - 0 ~ 10 (value 0 means maximum allowable)

DO NOT FORGET TO PRESS "OK" BUTTON TO SAVE YOUR SETTINGS.

EVENT RULE

EV3830 Series IP Stand Server only handles motion detection and periodic timer.

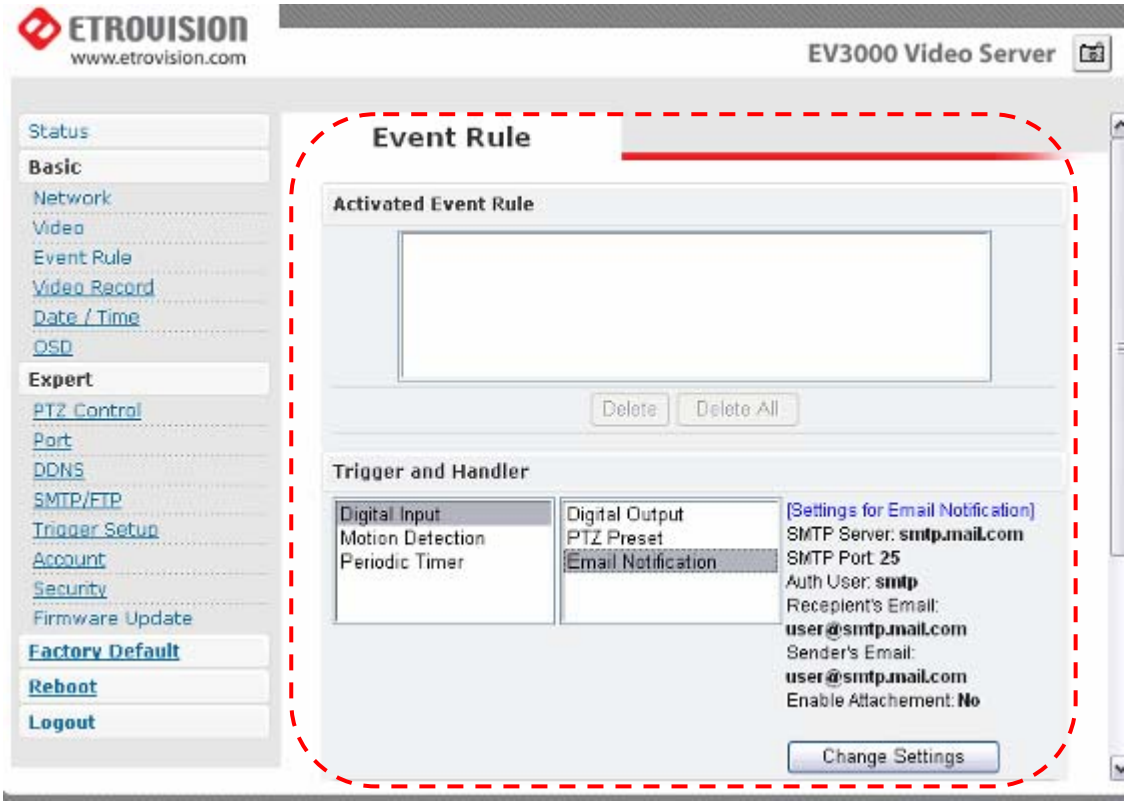
Events handled by EV3830 Series IP Stand Server

1. Motion Detection

2. Periodic Timer

Actions supported by EV3830 Series IP Stand Server

1. E-mail Notification



EVENTS HANDLED

Motion Detection

If motion is detected on the areas defined on the video stream, an event will be triggered based on the rule lists.

Periodic Timer

In a pre-defined time interval, an event will be triggered based on the rule lists.

ACTIONS TRIGGERED

E-mail Notification

E-mail can be sent based on occurrence of an event listed out in "***Rule Lists***".

RULE LISTS - ADDING/DELETING

Select an event and select corresponding action. Click **add** button and notice that is added in the **Rule lists** Information box.

MODIFYING RULE LISTS

Rule list items can be deleted individually or wholly by clicking **Delete All** button.

VIDEO RECORD

Choose **Enable** checkbox to record video/snapshot during a Motion detection or Digital IN event.

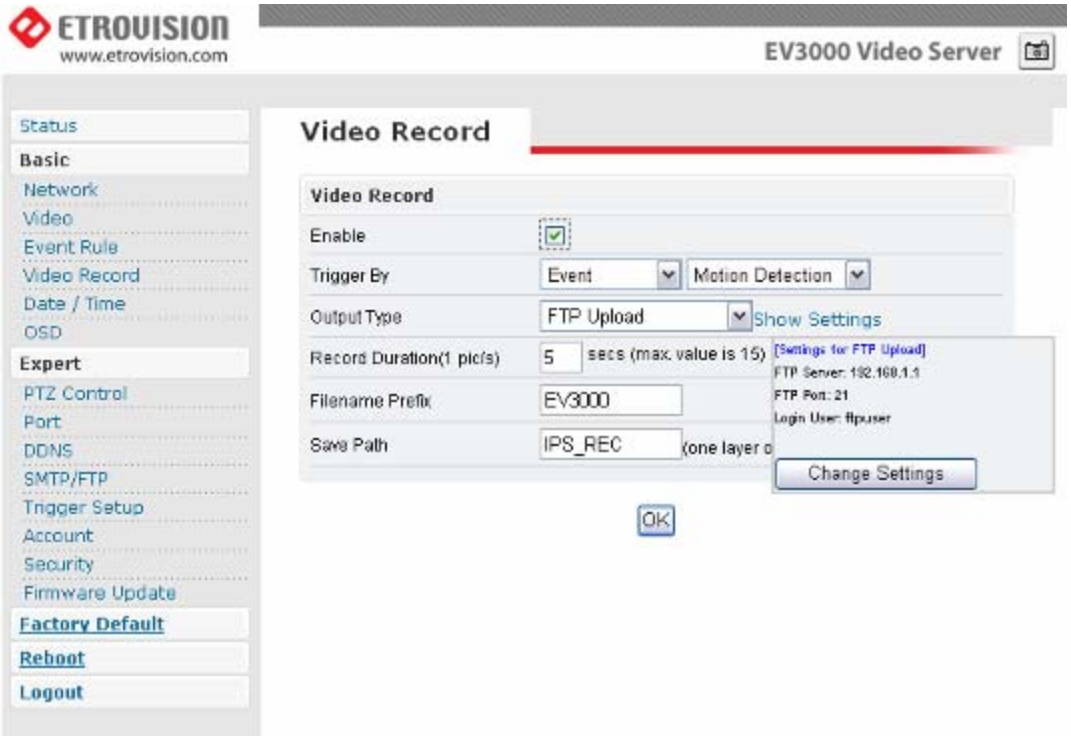
Choose between two kinds of events – Motion detection / Digital IN

Default option of output is FTP upload

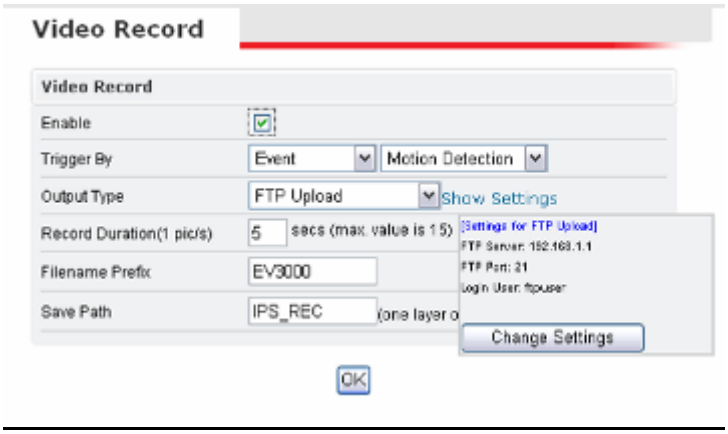
Video file size - max... 15 seconds duration

File name prefix – user defined

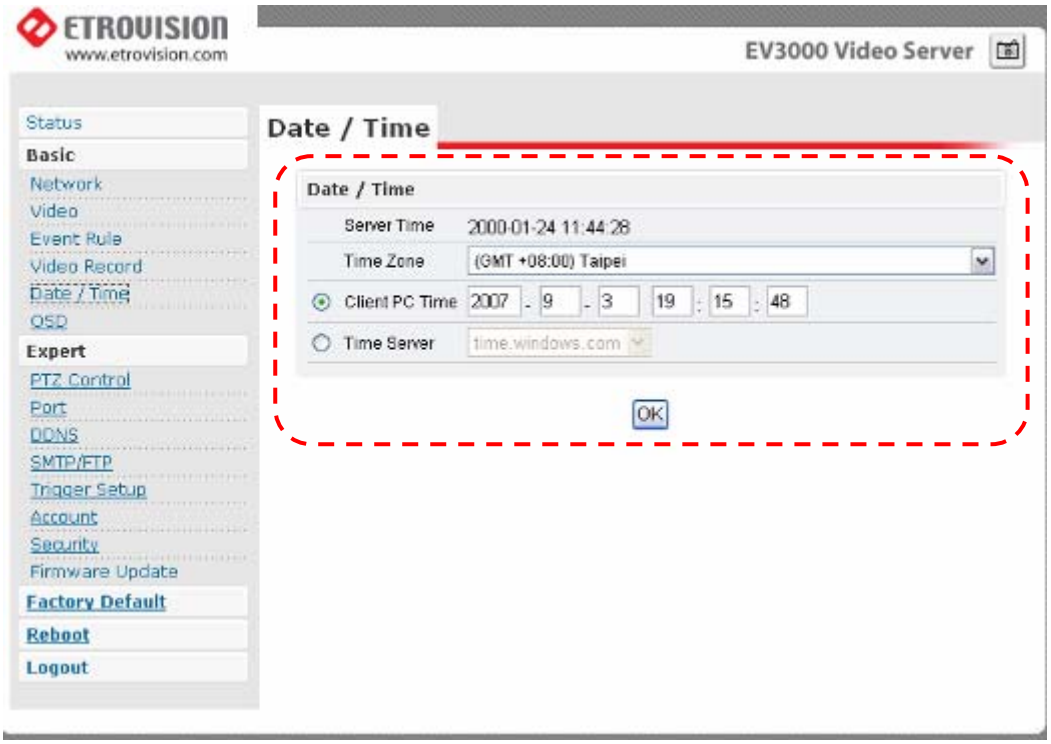
You can also define the folder name (path).



Scheduled recording can also be done by defining the time and day.



DATE & TIME



- Date and time settings can be synchronized with PC directly by clicking "Client PC time" check box. Click "**OK**" after you have made selection.

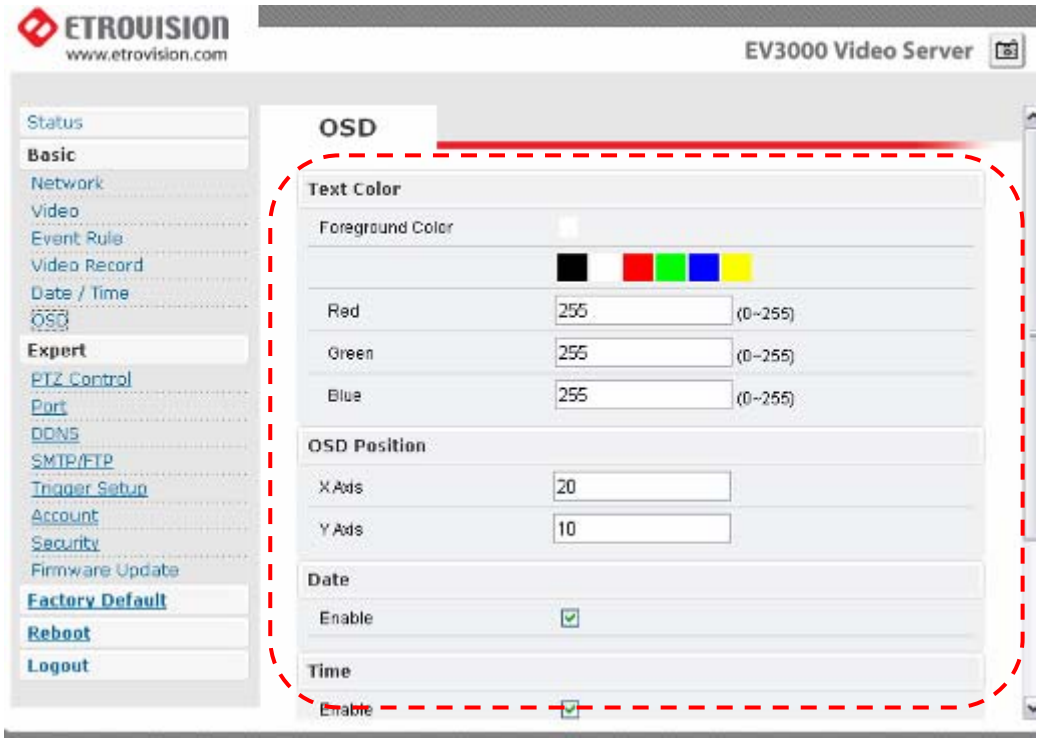
- Time zone can be chosen by choosing either of the two time servers listed
- Either of the two time servers can be chosen to synchronize video server time. They are listed as follows should you choose **Time Server.** Click "**OK**" after you have changed settings.

- If you want to manually input time server, choose "**Other**" then you can find a manual input edit box appear. Key in your preferred time

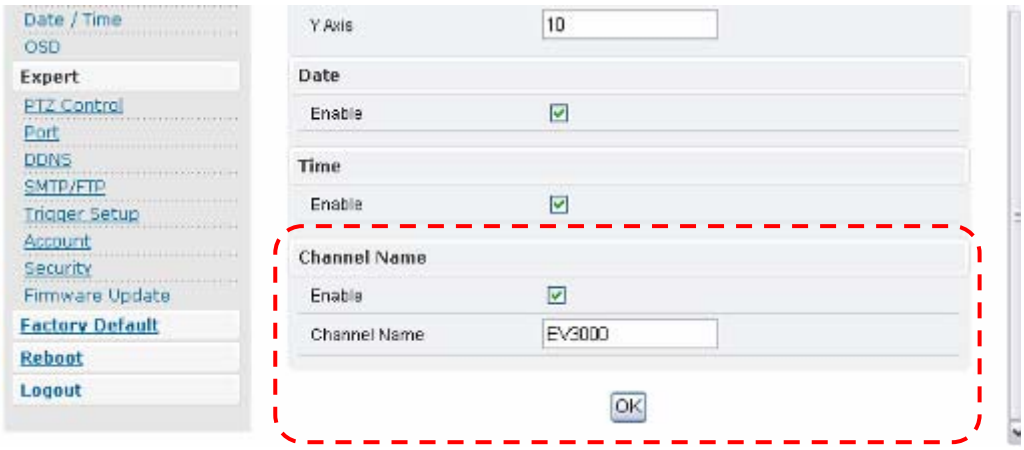
server and click "**OK**".

OSD

Click on your desired choice of color. Values will change accordingly for R, G, and B. If you desire some other color, you can manually define those corresponding R, G, B values in the boxes as appropriate. Position of OSD can be changed by defining the X, Y values. Date & Time can be individually enabled/disable by "Date" & "Time" checkboxes.

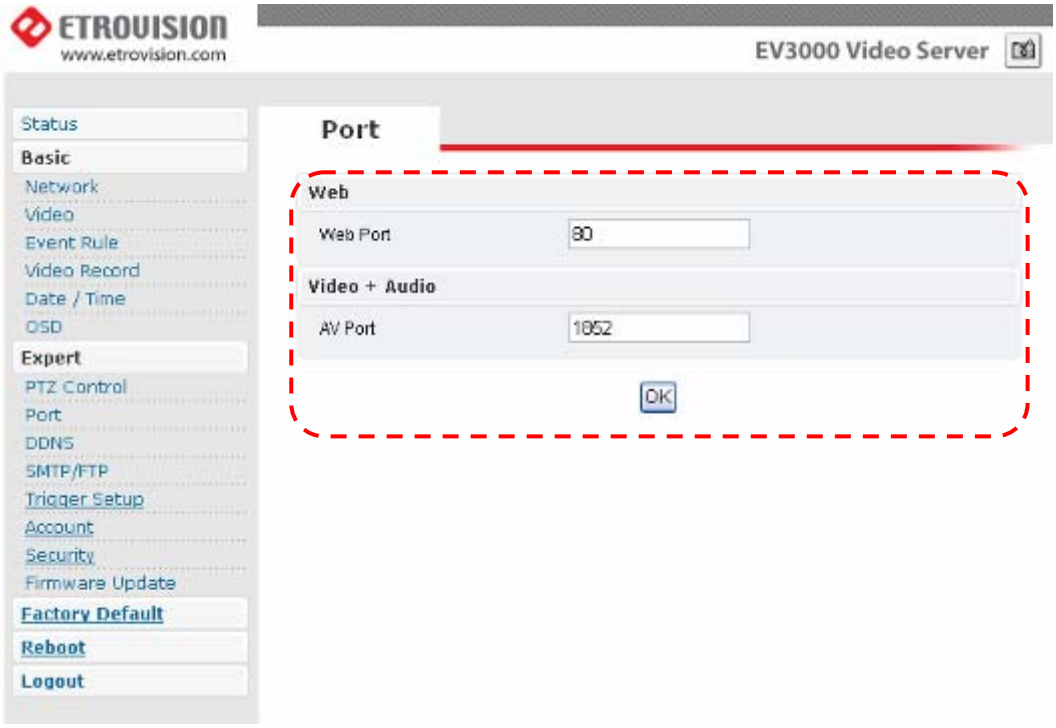


Channel name can be shown/hidden by the channel name "**Enable**" checkbox. It can be manually typed in the "**Channel name**" text box and changes can be noticed.



PORT

The values of WEB and AV port can be changed as necessary.



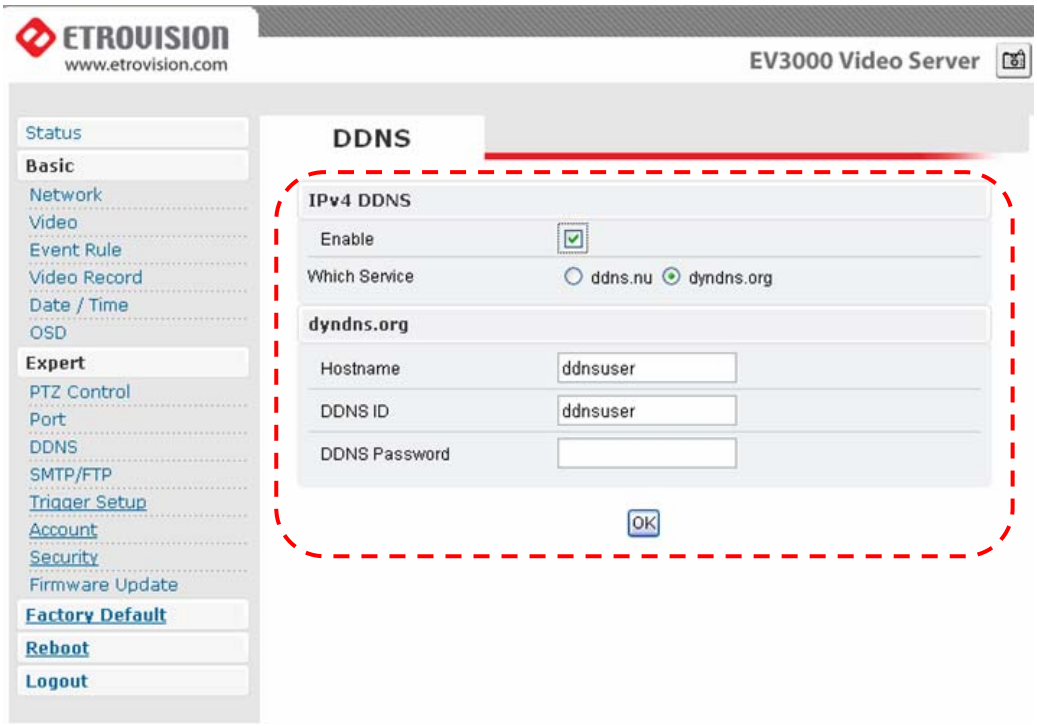
Web

- Web Port default is 80

Video + Audio

- Default is 1852 for video/audio data transmission.

DDNS

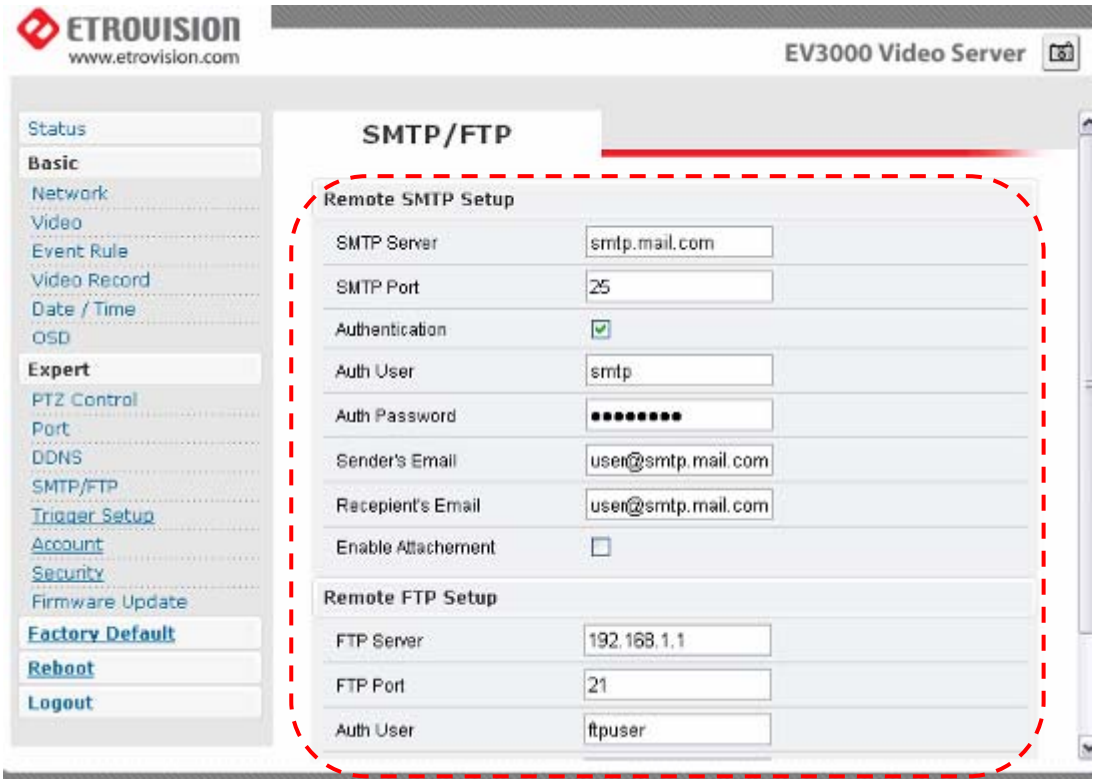


DDNS is the function that maps an IP address to a host name. If EV3830 Series IP Stand Server is set to dynamic IP address, the host name by DDNS (Dynamic Domain Name Service) must be used instead of the IP address for credibility of network connection.

IPv4 DDNS

- Check "**Enable**" and select a service out of available two.
- Both services are required to register some items on each DDNS service site.
- For use of "**ddns.nu**" register at www.ddns.nu and for **dyndns** find the information at dyndns.org

SMTP/FTP



An e-mail notification & FTP upload service offered by EV3830 Series IP Stand Server notifies events or uploads snapshots to a remote FTP server.

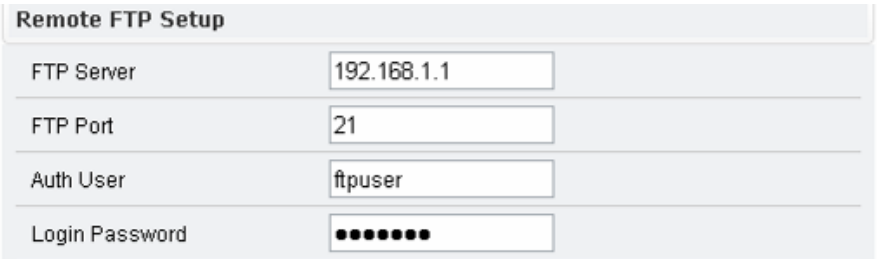
E-MAIL – SMTP SETTINGS

Fill in the details of SMTP server such as port number, user name, password, server name information. If you would wish to send attached snapshots, please check the appropriate check box.

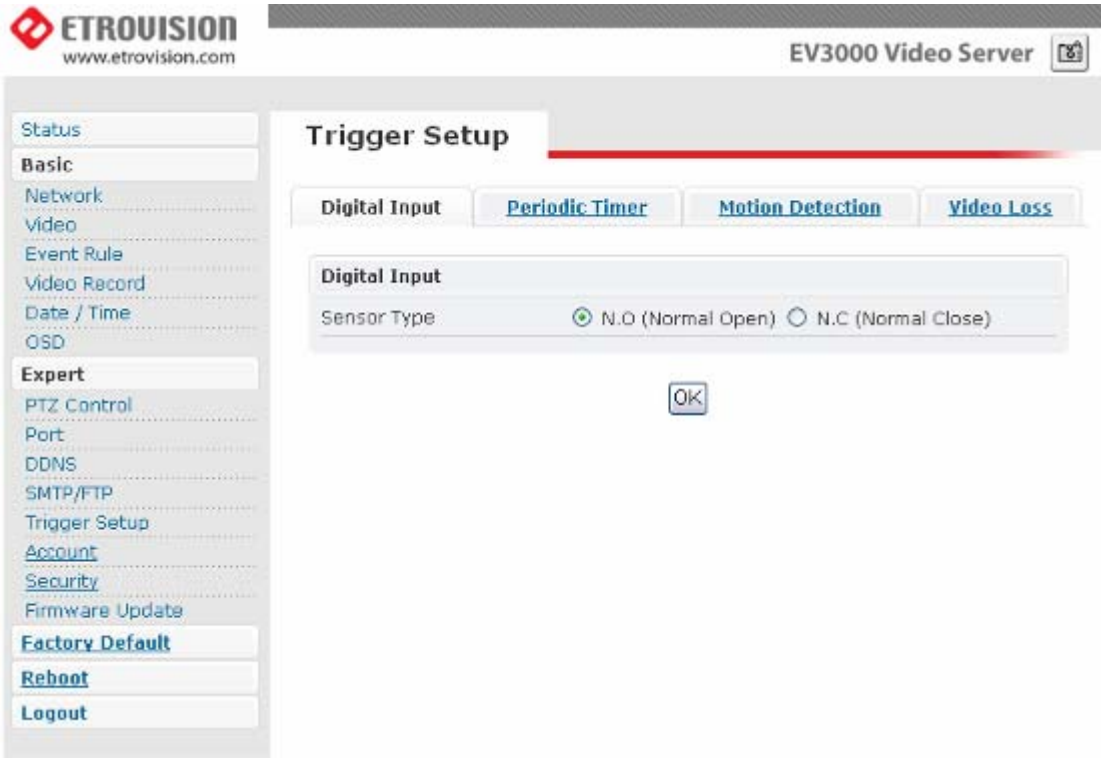
Sometimes Authentication is not always required by SMTP servers. Wherein only the SMTP server name and e-mail address details are enough to be input.

FTP SETTINGS

Fill in the details of remote FTP server, port number and user name, password.



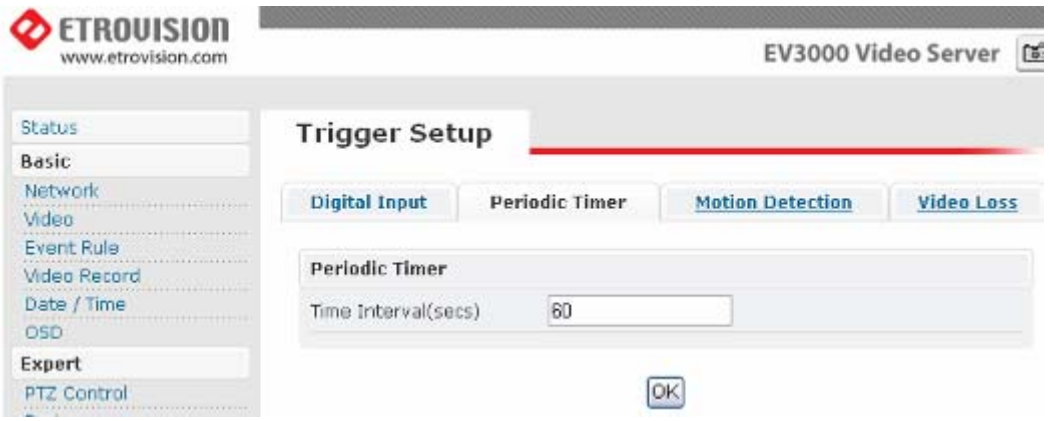
TRIGGER SETUP



Three different types of EVENTS can be configured.

PERIODIC TIMER

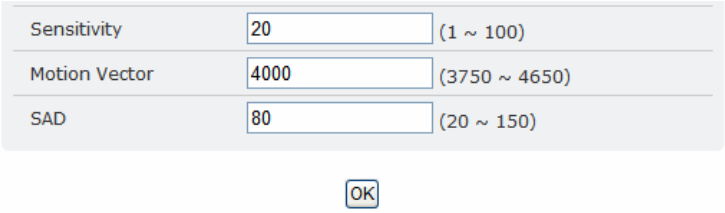
Timer interval can be set in terms of seconds. This will trigger an event when the time out is achieved.



MOTION DETECTION

- Detection Area
  - Total viewing screen area is divided into 9 square blocks and each of them is called area 1, area 2 etc., Click specific areas you want motion detection to be enabled. If a detection area is selected color changes to dark gray.

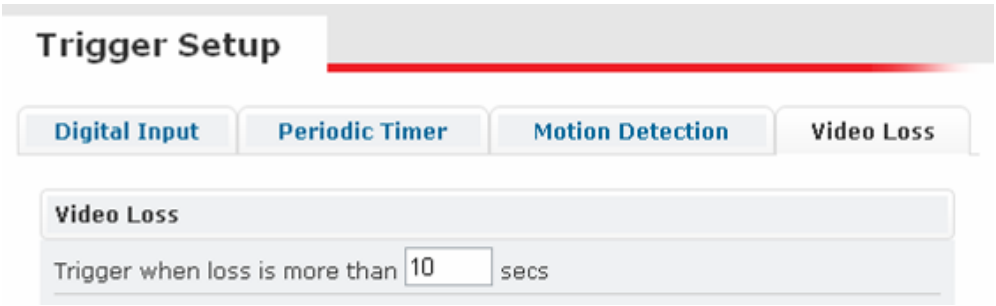
- Sensitivity value
  - Defines sensitivity of the motion detection. The range of the value is 1 to 100.
- Motion Vector value
  - To detect even slightest movement for objects in selected area, please select a lower motion vector value. The range of the value is 3750 to 4650.
- SAD value.
  - To only detect flashing light or any such significant activities on immovable objects, low SAD value should be chosen. In most cases, high SAD level is recommended. The range of the value is 20 to 150.



Motion detection enabled areas look as shown below. A simple click can select any of the boxes on detect area.

Video Loss

Can config how much time system should trigger an event for video loss

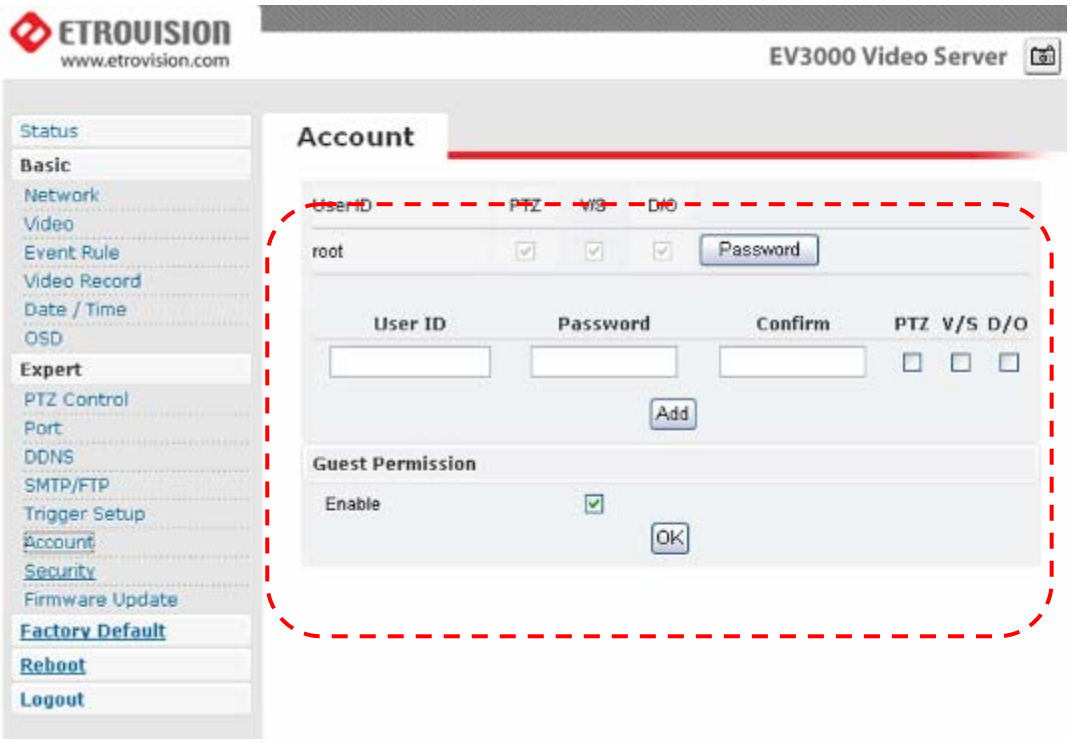


ACCOUNT

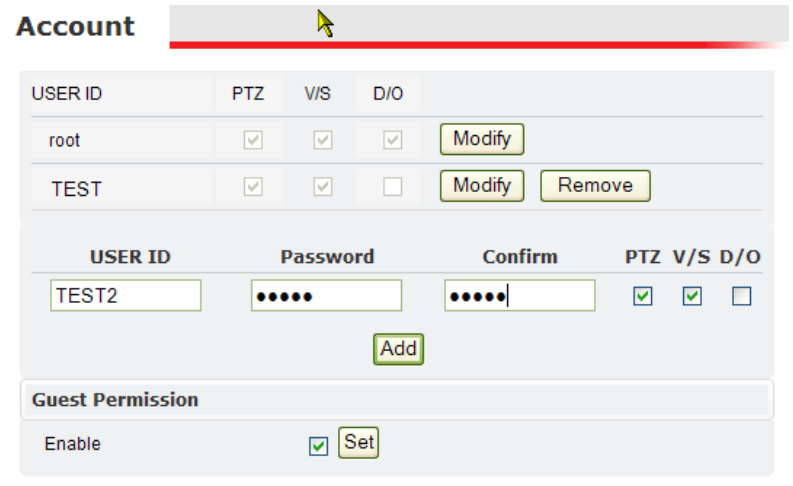
Administrator can create user accounts. Login as an administrator and create user accounts by pressing "**Add**". Each account has PTZ, Video settings and Digital Out privileges. They can be turned on or off anytime by the administrator.

There are limits on user name and password length and will be notified by

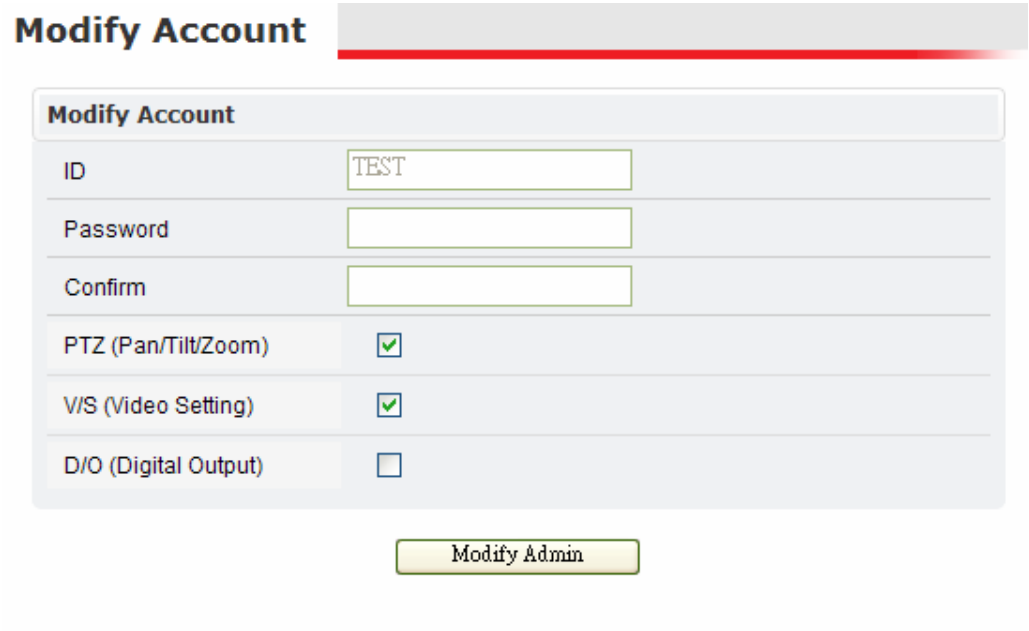
dialog boxes if the user name/password exceeds or under-runs that limit.



For each account, guest permissions can be turned ON/OFF. Any time, an account's settings can be modified by pressing the "**Modify**" button.



Administrator account can also be modified by the same modify button. Changing password needs confirmation.



Account Limitations

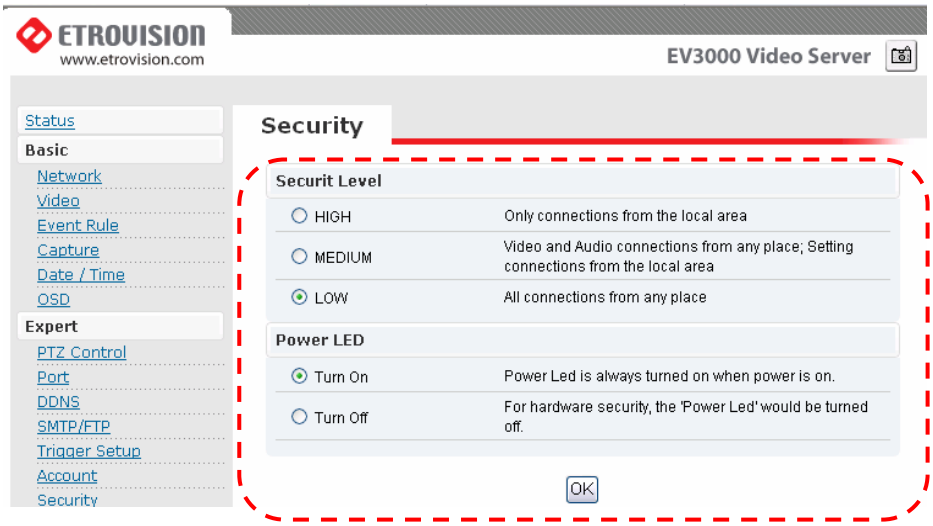
- Administrator can add up to a maximum of 5 users and assign properties for each of them.

Guest Permissions

- Guest account can be turned ON/OFF anytime.

SECURITY

The basic settings are **LOW** by default.



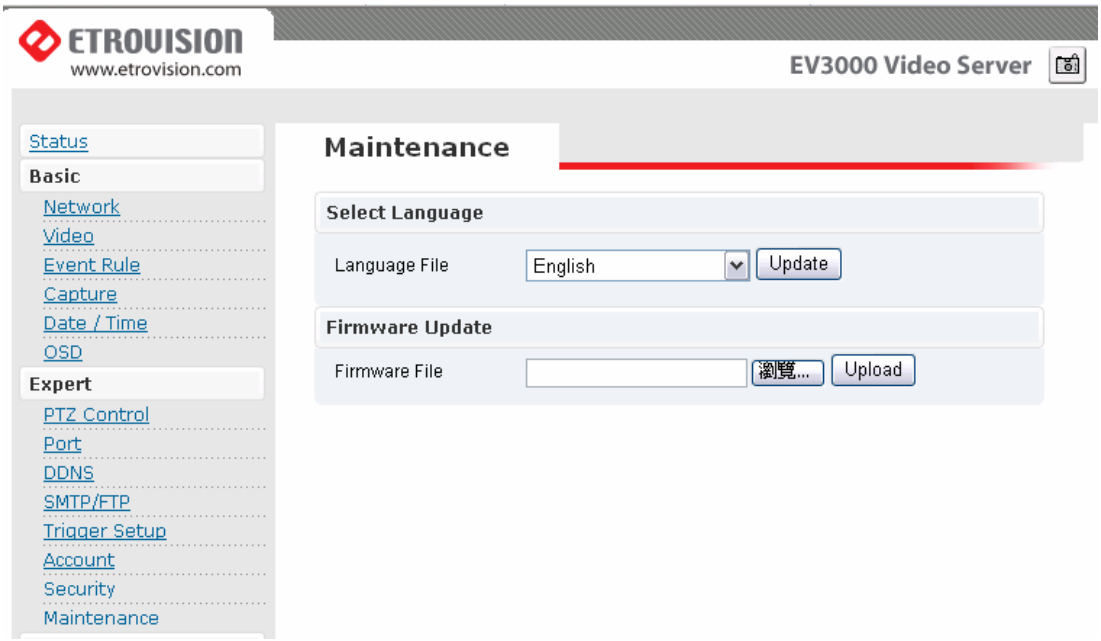
Security Level

- HIGH
  - ONLY LAN connections are allowed.
- MEDIUM
  - Video and audio connections from any location and settings from LAN are permitted.
- LOW
  - All connections from any location are permitted.

Power LED

- Turn On
  - Power Led is always turned on when power is on
- Turn Off
  - For hardware security, the 'Power Led' would be turned off.

Maintenance



Language

- Default settings are in English. A choice of Traditional Chinese is available.

Firmware update

- Firmware update binary file can be obtained from Etrovision Technology. Choose that and click **upload**. When uploading is done, reboot is required and will be automatically triggered.

9. FACTORY DEFAULT

After a confirmation dialog box, clicking **OK** button, will load default settings and do a reboot. You will see the reboot countdown timer running. Once done, you will see the login page. Please login with root/pass.

10. REBOOT

If you click **OK** on the dialog box, you will see the reboot countdown timer running. Once done, you will see the login page. Please login with root/pass or other appropriate login information.

11. LOGOUT

To return to the login screen, simply click **logout**. You should see yourself in the login page within seconds.

12. ETROLINK™ Config Port - FIRST TIME EXPERIENCE

If video server has to be quickly configured or has to be set to factory default settings, Etrolink™ config port is used to achieve that. Etrolink™ config port is a special USB port.

Insert mini USB cable onto Etrolink config port and connect other end to PC. When video server is powered on, Etrolink will not be operational. Once you are done working with Etrolink™ config port, remember to unplug USB cable from Etrolink™ config port.

NOTE

REMOVE USB CABLE WHEN YOU ARE FINISHED WITH QUICK CONFIGURATION.

SUPPORTED OS

PC running the following operating systems can support auto run of **Quick Config** application.

1. Windows XP (all editions) - auto run.
2. Windows 2000 (all editions) – needs to be manually run.
3. Windows 98 (SE) – needs to be manually run

   (Generic USB mass storage class driver (Microsoft) will be requested – prepare one in prior if you plan to use Etrolink™ based device recovery on Windows 98)

NO SOFTWARE INSTALLATION REQUIRED

There is no installation or setup of any software for Windows XP/2000 platforms.

STEPS FOR USING ETROLINK™ config port (*Windows XP PC*)

1. Disconnect **power cable** connected to EV3830 Series IP Stand Server.
2. Use mini-USB cable and connect appropriate end to Etrolink™ config port and connect other end to PC USB port.

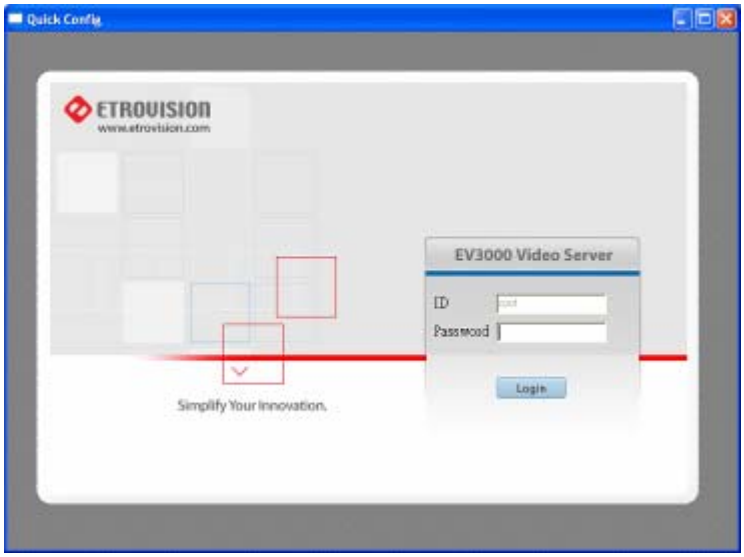
3. After 5 ~ 10 seconds depending on how fast your PC is, you can

notice "**Disk drive**" being detected.

4. A POP-UP dialog shows "**Config Wizard**" is ready to run. Press OK.

EV3000 (G:)
This disk or device contains more than one type of content.
What do you want Windows to do?
Config Wizard
using the program provided on the device
Copy pictures to a folder on my computer
using Microsoft Scanner and Camera Wizard
View a slideshow of the images
using Windows Picture and Fax Viewer
Print the pictures
using Photo Printing Wizard
View Your Photos
using Nero PhotoSnap Viewer
Copy pictures and view them
OK
Cancel

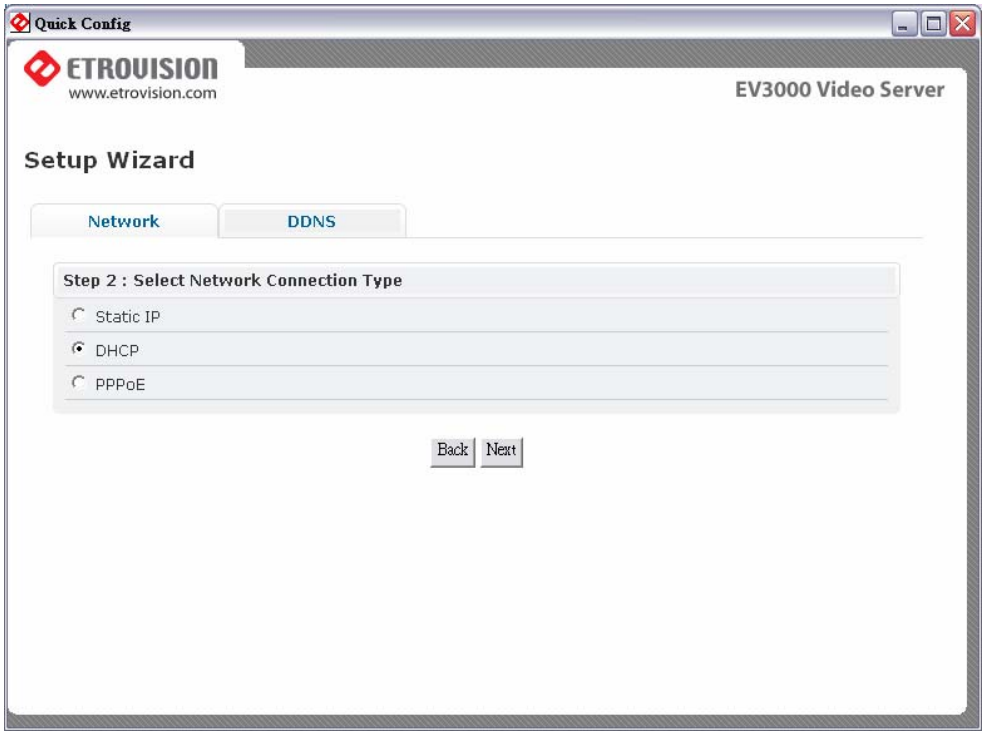
5. Double click Config Wizard. You will see a screen as follows.



You will be asked for password. Earlier, if you have never changed the password for user **root**, please type **pass** as the

password. Then click **login** button. If you input wrong password, you will get this dialog box.

You will see the network status of EV3830 .To navigate through Quick Wizard, click it and you will find a window appear as below.



If you would wish to change network settings of either

STATIC / DHCP / PPPoE

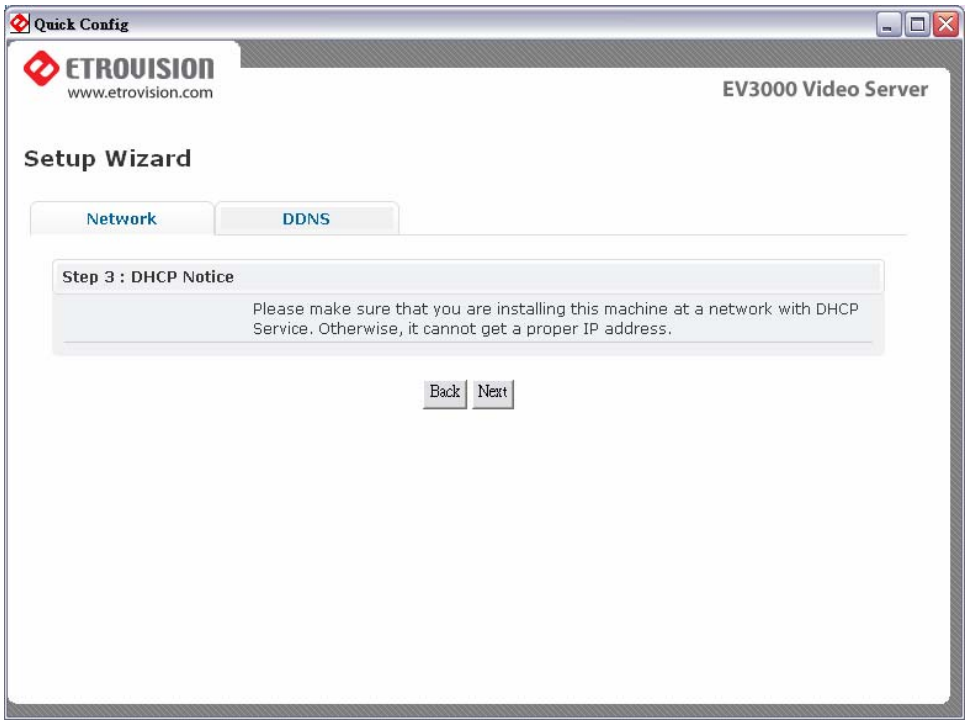
If you would want to setup **DDNS**, please click on the same for

detailed configuration.

Return to Network page to setup network further.

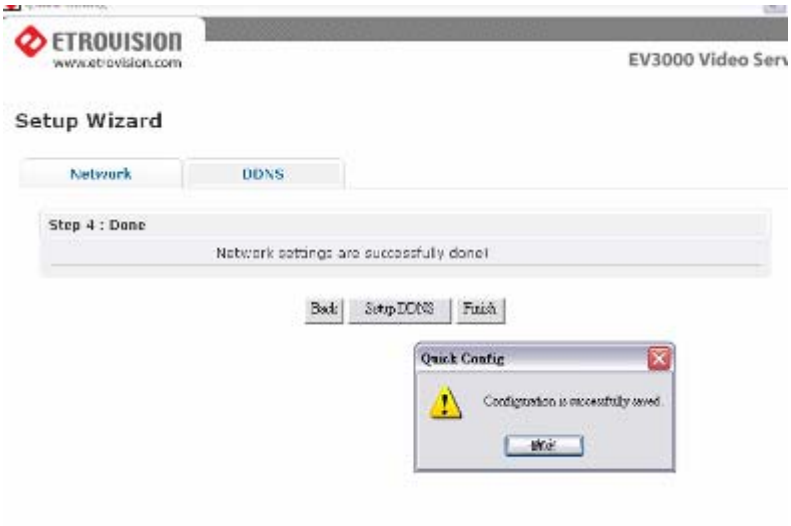
Please choose and click **next** for detailed configuration page.

For instance, shown below is a screen which has **STATIC** network configuration page. Click next to proceed.



Clicking next will show that settings are saved. You can click finish if you are done or go back or change other settings.

Similarly you can change other settings at ease.



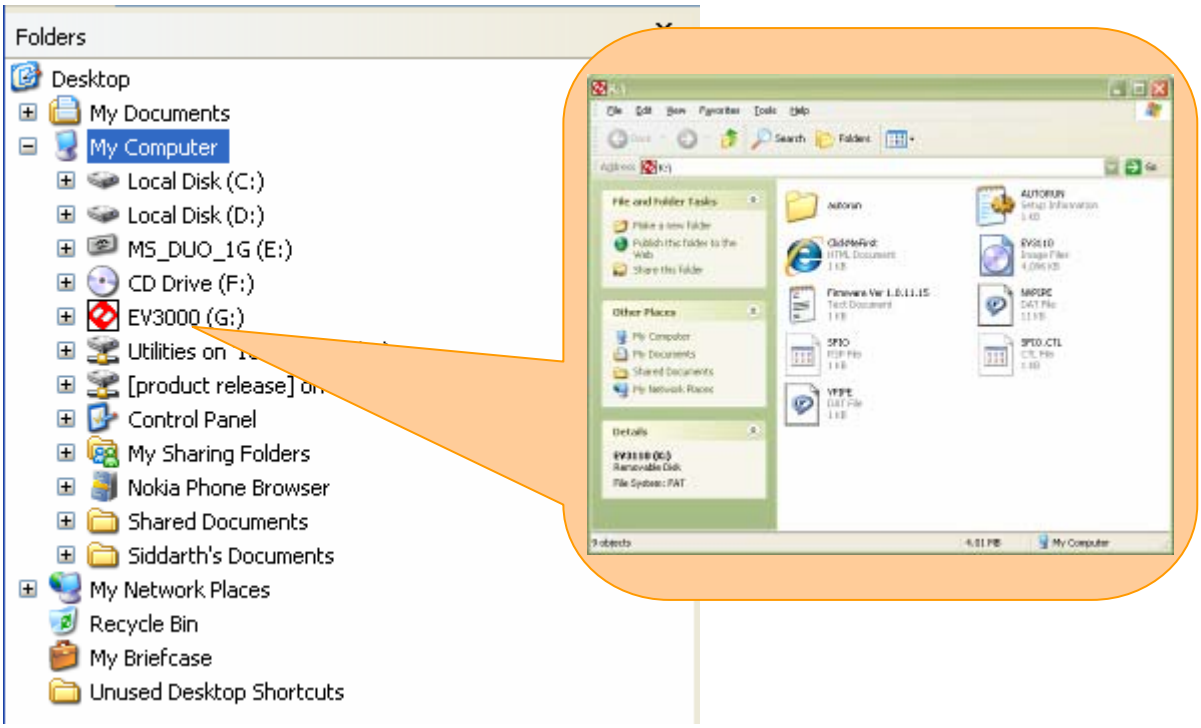
Note:

- *Connect EV3830 to your network by using a standard Cat-5 cable.*
- *Connect the video output of your camera with video in of video server, using standard 75Ω coaxial cable with BNC type connector.*
- *Connect speaker and active microphone to Audio Out/In.*

WHAT IF **QUICKCONFIG** DOES NOT AUTORUN?

In some PC, after connecting USB cable with Etrolink™ port, there might not be auto run of Quick Config application.

In that case, just open disk drive which looks like shown on screenshot below. It should have volume name starting with EVxxxx.



Open up a folder named "**autorun**". That folder contains a HTML executable file named "**autorun**". Double click that to run. You will find that it is the same "**Quick Config**" application is running. See the screenshots below to find that file on the disk drive.

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